

## PATENT ABSTRACTS OF JAPAN

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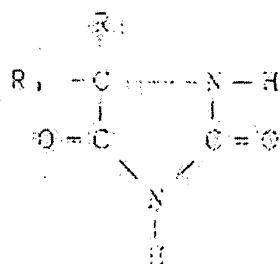
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(54) PRODUCTION OF ALPHA-AMINO ACID

## (57)Abstract:

PURPOSE: To produce an  $\alpha$ -amino acid by hydrolyzing hydantoin in contact with water in a liquid phase using a highly active catalyst consisting of at least one metal oxide selected from a group of zirconium oxide, titanium oxide and niobium oxide.

CONSTITUTION: Hydantoin [e.g. 5-( $\beta$ -methylthioethyl)-hydantoin] expressed by the formula (R1 and R2 are H, alkyl, substituted alkyl, cyclohexyl, phenyl or substituted phenyl) is hydrolyzed by bringing the hydantoin into contact with water in a liquid phase using at least one metal oxide selected from a group consisting of zirconium oxide, titanium oxide and niobium oxide as a catalyst to provide the  $\alpha$ -amino acid (e.g. methionine). The  $\alpha$ -amino acid is useful as a food, feed and medicine and an intermediate for agricultural chemical, medicine and high polymer. According to the



above-mentioned method, the objective compound can be obtained under mild conditions in high yield. Moreover, the method is economical, since the above-mentioned reaction and aftertreatment can be carried out without using water-soluble acid or alkali.

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**LEGAL STATUS**

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